

Datasheet for ABIN3083754

MLXIPL Protein (AA 1-852) (Strep Tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	MLXIPL
Protein Characteristics:	AA 1-852
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This MLXIPL protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MAGALAGLAA GLQVPRVAPS PDSDSDTDSE DPSSLRRSAGG LLRSQVIHSG HFMVSSPHSD SLPRRRDQEG SVGPSDFGPR SIDPTLTRLF ECLSLAYSGK LVSPKWKNFK GLKLLCRDKI RLNNAIWRAW YIQYVKRRKS PVCGFVTPLQ GPEADAHKRP EAVVLEGNYW KRRIEVMRE YHKWRIYYKK RLRKPSREDD LLAPKQAEGR WPPPEQWCKQ LFSSVVPVLL GDPEEEPPGGR QLLDLNCFLS DISDTLFTMT QSGPSPLQLP PEDAYVGNAD MIQPDLTPLQ PSLDDFMDIS DFFTNSRLPQ PPMPNSNFPEP PSFSPVVDL FSSGTLGPEV PPASSAMTHL SGHSRLQARN SCPGPLDSSA FLSSDFLLPE DPKPRLPPPP VPPPLLHYPP PAKVPGLEPC PPPPFPPMAP PTALLQEEPL FSPRFPFPTV PPAGVSPLP APAAFPPTPQ SVSPAPTPTF PIELLPLGYS EPAFGPCFSM PRGKPPAPSP RGQKASPPTL APATASPPTT AGSNNPCLTQ LLTAAKPEQA LEPPLVSSTL LRSPGSPQET VPEFPCTFLP PTPAPTPPRP PPGPATLAPS RPLLVPKAER LSPPAPSGSE RRLSGDLSSM PGPGLSVRV SPPQPILSRG RPDSNKTENR RITHISAEQK RRFNIKLGFD TLHGLVSTLS AQPSLVSKA TTLQKTAEYI LMLQQERAGL QEEAQQLRDE
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IEELNAAINL CQQQLPATGV PITHQRFDQM RDMFDDYVRT RTLHNWKFVW FSILIRPLFE
SFNGMVSTAS VHTLRQTSLA WLDQYCSLPA LRPTVLNSLR QLGTSTSILT DPGRIPEQAT
RAVTEGTLGK PL

Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified by multi-step, protein-specific process to ensure correct folding and modification.
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a **made-to-order protein** and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.

The big advantage of ordering our **made-to-order proteins** in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.
- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

Product Details

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALICE®): 1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE. 2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

Target Details

Target:	MLXIPL
Alternative Name:	MLXIPL (MLXIPL Products)
Background:	<p>Carbohydrate-responsive element-binding protein (ChREBP) (Class D basic helix-loop-helix protein 14) (bHLHd14) (MLX interactor) (MLX-interacting protein-like) (WS basic-helix-loop-helix leucine zipper protein) (WS-bHLH) (Williams-Beuren syndrome chromosomal region 14 protein),FUNCTION: Binds DNA as a heterodimer with MLX/TCFL4 and activates transcription. Binds to the canonical E box sequence 5'-CACGTG-3'. Plays a role in transcriptional activation of glycolytic target genes. Involved in glucose-responsive gene regulation (By similarity). Regulates transcription in response to changes in cellular carbohydrate abundance such as occurs during fasting to feeding metabolic transition. Refeeding stimulates MLXIPL/ChREBP transcription factor, leading to increased BCKDK to PPM1K expression ratio, phosphorylation and activation of ACLY that ultimately results in the generation of malonyl-CoA and oxaloacetate immediate substrates of de novo lipogenesis and gluconeogenesis, respectively (By similarity). {ECO:0000250 UniProtKB:Q2VPU4, ECO:0000250 UniProtKB:Q9HAP2}.</p>
Molecular Weight:	93.1 kDa
UniProt:	Q9NP71
Pathways:	Carbohydrate Homeostasis , Regulation of Carbohydrate Metabolic Process

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies
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Application Details

	as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.</p> <p>During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!</p>
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process